Developing a Shared Schematic of California's Water Management System

As part of a Statewide Water Analysis Network (SWAN)¹, DWR is interested in facilitating pilot studies to collaboratively develop a shared physical schematic of California's water management system to form common linkages of information sharing among local, regional, State, and federal planning efforts in California. The intent is to provide a common spatial framework for hydrologic, economic, and water management data and studies. To be successful, each pilot study needs participation by water agencies and individuals with relevant interest and experience, and who can devote staff time or other resources. We also need to select a geographic region for each pilot study where local, State, and federal agencies are interested in working collaboratively to develop a shared physical schematic.

Why Do We Need a Shared Physical Schematic?

There are numerous existing schematics of California's water management system used by local, State, and federal agencies to perform water planning studies. These schematics are embedded in several planning models which provide incomplete, overlapping, and often inconsistent representations of California's water management system. For example models like CALSIM, CALVIN, WEAP, and CVPM all represent portions of the Central Valley, but it is difficult to share data between them and determine if they use information consistently. These models often represent the water management system at a coarse level and do not always provide information at the scale needed for planning by a local water agency.

What Are the Proposed Activities for each Pilot Study?

- Select a geographic region for each pilot study where local, State, and federal agencies, are interested in working collaboratively to develop a shared physical schematic.
- Review the geographic representation, network flow diagrams (where available), and desirable definitions and descriptions of physical network elements.
- Work collaboratively with stakeholders to develop a shared physical schematic of California's water management system that is stored, updated, documented, and made available electronically. It is likely that the schematic will have layers of detail to facilitate coarse and detailed analysis, as well as protection of security-sensitive details.
- Provide recommendations and protocols for developing a geographic and temporal representation of California's water management systems and definition, description, and documentation of physical network elements to permit consistent analysis at statewide and regional scales.
- Recommend assurances and protocols to prevent unlawful or unintended use of information.

¹ See http://www.waterplan.water.ca.gov/swan/index.cfm for the complete SWAN proposal.

- Solicit feedback from the CWP Advisory Committee and other stakeholder venues on the proposed recommendations.
- Develop a strategy for how best to roll out and update the shared schematic and how to encourage water planners to apply it to their activities.

How Will Results of each Pilot be Used?

Results of each pilot study will be used by improve the representation of California's water management system to form common linkages of information sharing among local, regional, State, and federal planning efforts in California.

Who to Contact if Interested?

Rich Juricich, California Department of Water Resources (916) 651-9225

Juricich@water.ca.gov